Work Order ID 97502 *97502* Page 1 Thursday, February 21, 2013 12:57:53 PM Item ID: D3199-1 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bracket **Start Qty: 30.00** *30* **Start Date:** 2/20/2013 **Cust Item ID:** Required Date: 2/28/2013 Req'd Qty: 30.00 *30* **Customer:** Reference: Run Date: 1307 Tooling: Approvals: **Process Plan:** Date: Stop Date: _____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. **Work Center ID** Description Qty Code **Run Hours** Qty Number Stamp Draw Nbr **Revision Nbr** D3199 Е 100 0.00 FLOW WATER JET 36 El 13-6-28 *100* 0.00 Waterjet Memo FLOW CNC Wateriet Cut as per Dwg D3199 Dwg Rev: 304.040 Deburr if required 110 QC2- Inspect parts off machine FAI/FAIB 0.00 *110* 36 13-6-28

0.00

Memo

OC

Quality Control

NCR:	Yes /	No
INCN.	162 /	110

DQA:

Date:

NCR: Ye	es / No				WORK ORDER NON-	·COI	NFORI	WANCE / UPDATE		QA Closed:	Date	e:
Work Orde	···	-			DISPOSITION			AGAIN	ST DE	PARTMENT,	PROCESS	
Part N		-			Rework Scrap		ſ	Skid-tube Crosstul Machining Small F	ab	-1	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	0	<u></u>			Use-as-is Work Order Update	_		noforming Finishi Large Fab Composi	~ —	Rec/Stor	e/Packaging Supplier	Other
Root				Descri	ption of work order update		Initial	Action		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Cł	nief Eng	Description		Date	Verification	QC Inspector
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Other												
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	Centre N	ot Conce	ntric to C	o/s	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspect	ion Incomplete	L	Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs		Instruct	tions Incomplete/Unclear	L	Part Lost/M	issing [Wrong Stock Pulled
Γ	Cuffs				Contamination		Mainte	enance		Part Moved		
	Heat Trea	at			Countersink		Mislabe	eled		Positioned \	Vrong _	
	Inspectio	n Strip in	Tube		Cut Too Short		Misread	d		Power Loss/	Surge	Other
	Ripples in	n Bend			Drill Holes		Offset					
ľ	Torque V	Vaves in E	Extrusion	,	Drawing		Out of	Calibration				
ľ	Turning S	Sequence			Finish		Out of	Sequence				
	Wave/Tv				Folio		Outside	Dimensions				

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Work Ord Thursday, Febru		502 12:57:53 PM		*97!	502*					Page 2
tem ID: Revision ID: tem Name:	D3199-1 Bracket			Accept	*N900	<u>0401</u>	^^ *	Setup Sta	į V.	S1* S2*
Start Date: Required Date: Reference:	2/20/2013 : 2/28/2013	Start Qty: 30.00 Req'd Qty: 30.00		Λ* Λ*	Cust Item I: Customer:	D:				
Approvals:		an:	Date:	· ·		nte:		Run Sta	" \	R1* R2*
Sequence ID/ Work Center I	D -	Operation Description		Set Up/ Run Hours	Tool ID	Tool # Pla	-	Reject Qty	Reject Number	Insp. Stamp
20 *120* QC Quality Control	·	QC8- Inspect parts - secon	nd check	0.00			(35) (34)) B) B-C	アピタ	109 170
130 Small Fab		Small Fab Memo Form as per d	lwg D3199 use DT	0.00 0.00 9723			_35			Sh 18 le
					<i>7</i> - 4	, v.				
40 * 4 4 0 *		QC5- Inspect part comple	teness to step on V	0.00 S	.		39			
140 QC QC Quality Control		Memo		0.00	~ V6		Court	<u> </u>		

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NCR:	Yes	1	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date: 13/67//8	
OA Closed: (1) Date: 13/7/17	

									QA Closed.	Date.	1.// 11//
Work Order	. O	750	2		DISPOSITION			AGAINST DE	PARTMENT		
		, 1) 0			Rework		Skid-tube	Crosstube	1	Water Jet	Engineering
Part No	0. <u>D3</u> 1	1-19	١		Scrap	} }	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	~ <u>~</u>	- (Use-as-is	Ther	moforming	Finishing	-	e/Packaging	Other
NCR No	D. 13.	-24	Y)		Work Order Update		Large Fab	Composite		Supplier	
			<u> </u>		•						
Root				Descri	ption of work order update	Initial	Acti	ion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief En	g Descri	iption	Date	Verification	QC Inspector
Doc/Data	13.06.13			one P	ilec e	10A					
Equip/Tooling		120	۱. ا	500 Q	iece was cut hed And I hole	16	/			DAS	(DAG)
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Setup				Was	off set	0,1	ha 9	polace	13/09/13	-1	127012
Other						3/07/16			`	13/06/23	977012 13/07/16
1 -	<u>×</u>	<u> </u>	2	(part	move during		16 200) \		:	13107/16
Supplier	_			cuttin	1 har cagnowsh		\$ 5.30	,)			
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l' -	Crushed/	Crimped		F	Burrs	⊢	ctions Incomplete/L	Inclear	Part Lost/M	<u> </u>	Wrong Stock Pulled
-	Cuffs	ci iiipeu.		-	Contamination		tenance	- Incical	Part Moved	.55.11.6	
-	Heat Trea	, nt		-	Countersink	Misla			Positioned V	Vrong	
-	Inspection		Tube	<u> </u>	Cut Too Short	Misre			Power Loss/		Other
-	Ripples in	•		-	Drill Holes	Offset		<u> </u>	J. J. J. 2000)		1
-	Torque W		xtrusion	, -	Drawing	\vdash	f Calibration		<u> </u>		
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	er ID 97502 uary 21, 2013 12:57:53 PM		*975	02*						Page (
Revision ID: Item Name:	D3199-1 Bracket 2/20/2013	° *30*	Accept	*N900040 Cust Item ID: Customer:	100	* s		Start Stop	ı V	
Approvals:	Process Plan:QC:			Date:		R	tun	Start Stop		R1*
Sequence ID/ Work Center II 150 *150* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3 Memo START TOVEN T	.5.6) per QSI005 4.3 1979 TIME: 9.30 EMPERATURE: 30	Set Up/ Run Hours 0.00	Tool ID Tool #	Code	Accept Qty 35	Reje Qty]	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC3- Inspect Part Fin	ish	0.00	; • - 16	3	35				

170

Identify as per dwg & Stock Location: 5T236

170

Quality Control

Packaging

Packaging

Memo

0.00

35x M.N. 13-07-16

											DQA:	Date:	
NCR: Y	es ,	/ No				WORK ORDER NON-	CON	NFORM	MANCE / UPD	DATE	_		
											QA Closed:	Date:	
Work Orde	r.					DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
WOIK OIGE	'					Rework	7		Skid-tube	Crosstube]	Water Jet	Engineering
Part N	ο.					Scrap			Machining	Small Fab	Prod	l. Eng. Coor.	Quality
						Use-as-is]		noforming	Finishing	Rec/Stor	e/Packaging	Other
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Root					Descri	iption of work order update	1	nitial	Act	ion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
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Work Ord Thursday, Febr		7 502 3 12:57:53 PM		*97!	502*							Page 4	
Item ID: Revision ID: Item Name: Start Date: Required Date Reference:	D3199-1 Bracket 2/20/2013 2/28/2013	Start Qty: 30.00 Req'd Qty: 30.00	*30* *30*	Accept	*N900 Cust Item Customer:		100)*	Setup	Start Stop	iA	S1* S2*	
Approvals:	Process Pl	an:	Date:	Tooling:	D	ate:			Run	Start	<i>"\N</i>	R1*	
	QC:		Date:	SPC (Y/N):	D	ate:				Stop	*N	R2*	
Sequence ID/ Work Center I	(D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept	t Re Qt	•	Reject Number	Insp. Stamp	
180		QC21- Final Inspection -	Work Order Release	0.00						1	/	$d\hat{\Lambda}$	
180 QC Quality Control		Memo		0.00					/	13/7	1/17	\	

MF 7-16

											DQA:	Date	:
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											QA Closed	: Date	:
Work Ord	er:						DISPOSITION			AGAINST D	EPARTMENT	'/PROCESS	
Part I	•						Rework Scrap Use-as-is			Skid-tube Crosstube Machining Small Fab noforming Finishing		Water Jet od. Eng. Coor.	Engineering Quality Other
NCR I	No.						Work Order Update]		Large Fab Composite		Supplier	
Root					Desc	crip	otion of work order update		nitial	Action	Sign &		
Cause		Date	Step	Qty		O	r Non-conformance	Ch	ief Eng	Description	Date	Verification	QC Inspector
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	L	Cracks			į		Broken/Damaged	L	Inspecti	on Incomplete	Part Incorre	ect	Weld
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		Torque W	aves in E	xtrusio	n (Drawing		Out of 0	Calibration			
		Turning Se	equence		ſ		Finish		Out of S	Seguence			

Outside Dimensions

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Wave/Twist in Tube

Folio

DART AEROSPACE LTD	Work Order:	91502
Description: Bracket	Part Number:	D3199-1
Inspection Dwg: D3199 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.210	+0.005/-0.001	0.215	~		Shm 01	
0.575	+/-0.010	0.583			JKIN 01	
1.090	+/-0.010	1.090	/			
2.015	+/-0.010	2.015				
2.971	+/-0.010	2.972	/			
1.830	+/-0.010	1.829	~			
4.830	+/-0.010	4.829	~			
4.030	+/-0.010	4.028				
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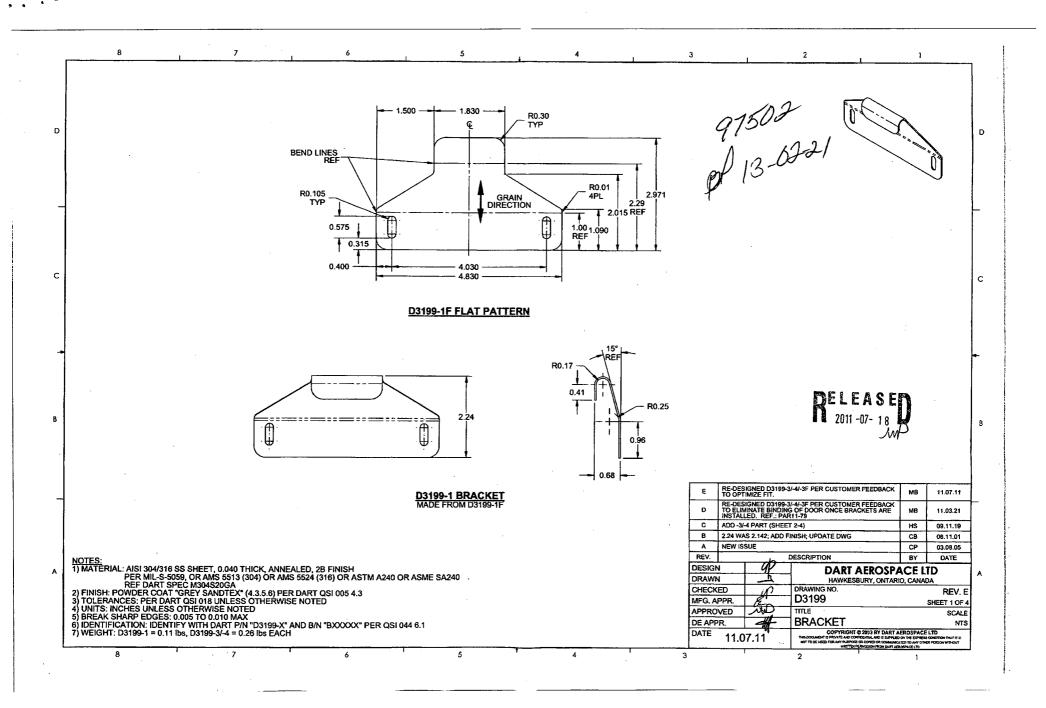
Measured by:	EZ.	Audited by:	SAC	Preliminary Approval:	
Date:	13-06-27	Date:	でのとすべゅ	Date:	

Rev	Date	Change	Revised by			
Α	06.10.20	New Issue	KJ/JLM a	2/1/		
В	06.11.24	Dwg Revision revised	KJ/JLM			
С	11.03.08	Dwg Rev updated	KJ 10 -			
D	12.02.06	Dwg Rev updated	KJ ek			

											DQA:	Date:	
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work Order.						Rework	۱ ٦		Skid-tube Crosstube			Water Jet	Engineering
Part N	lo.					Scrap			Machining Small Fab		Prod	d. Eng. Coor.	Quality
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NCR N	lo.					Work Order Update	Work Order Update Large Fab Composite					Supplier	
Root					Descr	ption of work order update		Initial Action			Sign &		
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		Cracks Broken			Broken/Damaged		Inspection Incomplete			Part Incorrect		Weld	
		Crushed/CrimpedBurrs					Instructions Incomplete/Unclear		\vdash	Part Lost/Missing Wrong Stock Pulled		Wrong Stock Pulled	
		Cuffs Contamination				<u> </u>	Maintenance			Part Moved			
		Heat Trea				Countersink		Mislabeled		-	Positioned Wrong		J _{ou} .
***	Inspection Strip in Tube			Tube	Cut Too Short	-	Misread	j		Power Loss/	Surge	Other	
		Ripples in			-	Drill Holes	\vdash	Offset		-			
,		Torque W			` 	Drawing	\vdash	-	Calibration	-	 	•	
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	Wave/Twist in Tube				- 1	Folio		Outside Dimensions					

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Wave/Twist in Tube



NCR:	Yes	1	No
IVCIV.	162	,	140

DQA: _____ Date: _____

NCR: Y	es / No				WORK ORDER NON-	CON	NFURIN	MANCE / UPDA		QA Closed:	Date:		
WI- OI-	DISPOSITION						AGAINST DEPARTMENT/PROCESS						
Work Order:					Rework	Skid-tube Crosstube			Water Jet Prod. Eng. Coor.		Engineering Quality		
Part N	o				Scrap Use-as-is	┨ ┨	Machining Small Fab Thermoforming Finishing			Rec/Store/Packaging Other			
NCR No.			Work Order Update	_	Large Fab Composite			Supplier					
Root Descri			otion of work order update Ir		nitial Action		Sign &						
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ŀ	Heat Treat			Countersink Cut Too Short	\vdash	1		-	Positioned Wrong Power Loss/Surge		Other		
}	Inspection Strip in Tube Ripples in Bend			Drill Holes	\vdash	Misread		<u>. </u>	Teomer ross/	Juige _	Tomer		
-	-		Futerial -	_	 	\vdash	Offset	Calibration ·					
-	 '	Torque Waves in Extrusion Drawing Turning Sequence Finish				-	4	Sequence					
-	Wave/Tw			\vdash	Finish Folio	-	4	e Dimensions					
	IVVave/IV	/15t III I UI	NC	1	II UIIU		i Uu tsiue	: UIIIICII3IUII3					

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